

WHAT IS CLAIMED IS:

1. A pharmaceutical composition consisting essentially of FSH and hCG in at least one pharmaceutically acceptable carrier, wherein the ratio of FSH to hCG is conducive, upon administration of said composition, to folliculogenesis and follicular maturation without ovarian hyperstimulation.

2. The composition of claim 1 free from any other proteins of mammal origin.

3. The composition of claim 1 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:25 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:75 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

4. The composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU

FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

5. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, and 200 IU FSH:200 IU hCG.

6. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU

FSH:400 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

7. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, and 50 IU FSH:400 IU hCG.

8. The pharmaceutical composition of claim 7, wherein the ratio of FSH to hCG is 50 IU FSH:100 IU hCG.

9. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, and 100 IU FSH:400 IU hCG.

10. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, and 100 IU FSH:25 IU hCG.

11. The pharmaceutical composition according to claim 1, wherein said FSH is human-derived FSH.

12. The pharmaceutical composition according to claim 1, in lyophilized form.

13. The pharmaceutical composition according to claim 1, in unit dosage form.

14. The pharmaceutical composition according to claim 13, in solid dosage form.

15. The pharmaceutical composition according to claim 14, wherein the solid dosage form is selected from the group consisting of capsules, tablets, suppositories, pills, powders, and granules.

16. The pharmaceutical composition according to claim 1 in liquid form.
17. The pharmaceutical composition according to claim 16 wherein the liquid form is supplied in a vial.
18. The pharmaceutical composition according to claim 16 wherein the liquid form is supplied in a pre-filled syringe or cartridge.
19. An assemblage comprising a first vial and a second vial, each of said vials containing a pharmaceutical composition according to claim 1, wherein the ratio of FSH to hCG differs between the first vial and the second vial.
20. The assemblage according to claim 19 further comprising written instructions on the timing for administering the compositions contained in the first and second vials.
21. A method of inducing ovulation, comprising:
 - (A) administering at least one pharmaceutical composition characterized by a ratio of FSH to hCG that is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:25 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:75 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU

FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

(B) monitoring serum hormone levels, follicle size and follicle number; and then

(C) inducing ovulation by administration of an hCG bolus.

22. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:25 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:50 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

23. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU

FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, and 200 IU FSH:200 IU hCG.

24. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

25. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, and 50 IU FSH:400 IU hCG.

25. The method of 21, wherein the ratio of FSH to hCG is 50 IU FSH:100 IU hCG.

27. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, and 100 IU FSH:400 IU hCG..

28. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, and 100 IU FSH:25 IU hCG.

29. The method of claim 21, wherein step (A) comprises administering in series at least two pharmaceutical compositions,

characterized by a ratio of FSH to hCG selected from said group, that is either the same or differs with respect to said ratio.

30. The method of claim 21, wherein each succeeding composition in said series contains hCG that is increased over the preceding composition in said series.

31. The method of claim 29, wherein the period of time between compositions of the series is selected from the group consisting of from 1 hour, 5 hours, 10 hours, 12, hours, 24 hours, 1 day 2, days . 3, days 4, days, 5 days, 6, days, 7, days, 8 days, 9 days, 10 days, 11, days, 11 days, 12, days, 13, days, 14 days, and 15 days.

32. The method of claim 21, wherein the composition further comprises pure FSH.

33. The method of claim 21, wherein the composition further comprises pure hCG.

34. A product comprising a first pharmaceutical composition comprising FSH and a second pharmaceutical composition comprising hCG, wherein the first and the second pharmaceutical compositions are administered together or separately during a controlled ovulatory stimulation protocol.

35. The product of claim 34, wherein the separate administration is sequential.

36. The product of claim 34, further comprising instructions for using the first and second pharmaceutical compositions.

37. The product of claim 34, further comprising a means for administering the first and second pharmaceutical compositions.

38. A use of a hCG to prepare a pharmaceutical composition for use with a pharmaceutical composition comprising FSH for infertility treatment.

39. A use of a FSH to prepare a pharmaceutical composition for use with a pharmaceutical composition comprising hCG for infertility treatment.

40. The use according to claim 38 or 39 for stimulating folliculogenesis or ovulation.

41. The use according to claim 38 wherein the ratio of FSH to hCG is conducive to folliculogenesis and follicular maturation without ovarian hyperstimulation.

AMENDED CLAIMS

[received by the International Bureau on 04 October 2004 (04.10.2004);
original claims 1-41 replaced by new claims 1-41 (8 pages)]

WHAT IS CLAIMED IS:

1. A pharmaceutical composition consisting essentially of FSH and hCG in at least one pharmaceutically acceptable carrier, wherein the ratio of FSH to hCG is conducive, upon administration of said composition, to folliculogenesis and follicular maturation without ovarian hyperstimulation.
2. The composition of claim 1 free from any other proteins of mammal origin.
3. The composition of claim 1 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:25 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:75 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.
4. The composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU

FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

5. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, and 200 IU FSH:200 IU hCG.

6. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU

FSH:400 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

7. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, and 50 IU FSH:400 IU hCG.

8. The pharmaceutical composition of claim 7, wherein the ratio of FSH to hCG is 50 IU FSH:100 IU hCG.

9. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, and 100 IU FSH:400 IU hCG.

10. The pharmaceutical composition of claim 3 wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, and 100 IU FSH:25 IU hCG.

11. The pharmaceutical composition according to claim 1, wherein said FSH is human-derived FSH.

12. The pharmaceutical composition according to claim 1, in lyophilized form.

13. The pharmaceutical composition according to claim 1, in unit dosage form.

14. The pharmaceutical composition according to claim 13, in solid dosage form.

15. The pharmaceutical composition according to claim 14, wherein the solid dosage form is selected from the group consisting of capsules, tablets, suppositories, pills, powders, and granules.

16. The pharmaceutical composition according to claim 1 in liquid form.
17. The pharmaceutical composition according to claim 16 wherein the liquid form is supplied in a vial.
18. The pharmaceutical composition according to claim 16 wherein the liquid form is supplied in a pre-filled syringe or cartridge.
19. An assemblage comprising a first vial and a second vial, each of said vials containing a pharmaceutical composition according to claim 1, wherein the ratio of FSH to hCG differs between the first vial and the second vial.
20. The assemblage according to claim 19 further comprising written instructions on the timing for administering the compositions contained in the first and second vials.
21. A method of inducing ovulation, comprising:
(A) administering at least one pharmaceutical composition characterized by a ratio of FSH to hCG that is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:25 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:75 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU

FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

(B) monitoring serum hormone levels, follicle size and follicle number, and then

(C) inducing ovulation by administration of an hCG bolus.

22. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:25 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:50 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, 200 IU FSH:200 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

23. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:1 IU hCG, 50 IU FSH:5 IU hCG, 50 IU FSH:10 IU hCG, 50 IU FSH:25 IU hCG, 75 IU FSH:1 IU hCG, 75 IU FSH:5 IU hCG, 75 IU FSH:10 IU hCG, 75 IU FSH:50 IU hCG, 75 IU FSH:100 IU hCG, 100 IU FSH:1 IU hCG, 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, 100 IU FSH:25 IU hCG, 100 IU FSH:50 IU hCG, 100 IU

FSH:75 IU hCG, 100 IU FSH:100 IU hCG, 150 IU FSH:1 IU hCG, 150 IU FSH:5 IU hCG, 150 IU FSH:10 IU hCG, 150 IU FSH:25 IU hCG, 150 IU FSH:100 IU hCG, 150 IU FSH:200 IU hCG, 200 IU FSH:1 IU hCG, 200 IU FSH:5 IU hCG, 200 IU FSH:10 IU hCG, 200 IU FSH:25 IU hCG, 200 IU FSH:50 IU hCG, 200 IU FSH:75 IU hCG, 200 IU FSH:100 IU hCG, and 200 IU FSH:200 IU hCG.

24. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:75 IU hCG, 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, 50 IU FSH:300 IU hCG, 50 IU FSH:400 IU hCG, 75 IU FSH:200 IU hCG, 75 IU FSH:300 IU hCG, 75 IU FSH:400 IU hCG, 100 IU FSH:200 IU hCG, 100 IU FSH:300 IU hCG, 100 IU FSH:400 IU hCG, 150 IU FSH:300 IU hCG, 150 IU FSH:400 IU hCG, 200 IU FSH:300 IU hCG, and 200 IU FSH:400 IU hCG.

25. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 50 IU FSH:100 IU hCG, 50 IU FSH:200 IU hCG, and 50 IU FSH:400 IU hCG.

26. The method of 21, wherein the ratio of FSH to hCG is 50 IU FSH:100 IU hCG.

27. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:100 IU hCG, 100 IU FSH:200 IU hCG, and 100 IU FSH:400 IU hCG..

28. The method of claim 21, wherein the ratio of FSH to hCG is selected from the group consisting of 100 IU FSH:5 IU hCG, 100 IU FSH:10 IU hCG, and 100 IU FSH:25 IU hCG.

29. The method of claim 21, wherein step (A) comprises administering in series at least two pharmaceutical compositions, characterized by a ratio of FSH to hCG selected from said group, that is either the same or differs with respect to said ratio.

30. The method of claim 21, wherein each succeeding composition in said series contains hCG that is increased over the preceding composition in said series.

31. The method of claim 29, wherein the period of time between compositions of the series is selected from the group consisting of from 1 hour, 5 hours, 10 hours, 12, hours, 24 hours, 1 day 2, days . 3, days 4, days, 5 days, 6, days, 7, days, 8 days, 9 days, 10 days, 11, days, 11 days, 12, days, 13, days, 14 days, and 15 days.

32. The method of claim 21, wherein the composition further comprises pure FSH.

33. The method of claim 21, wherein the composition further comprises pure hCG.

34. A product comprising a first pharmaceutical composition comprising FSH and a second pharmaceutical composition comprising hCG, wherein the first and the second pharmaceutical compositions are administered together or separately during a controlled ovulatory stimulation protocol.

35. The product of claim 34, wherein the separate administration is sequential.

36. The product of claim 34, further comprising instructions for using the first and second pharmaceutical compositions.

37. The product of claim 34, further comprising a means for administering the first and second pharmaceutical compositions.

38. A use of a hCG to prepare a pharmaceutical composition for use with a pharmaceutical composition comprising FSH for infertility treatment.

39. A use of a FSH to prepare a pharmaceutical composition for use with a pharmaceutical composition comprising hCG for infertility treatment.

40. The use according to claim 38 or 39 for stimulating folliculogenesis or ovulation.

41. The use according to claim 40, wherein the ratio of FSH to hCG is conducive to folliculogenesis and follicular maturation without ovarian hyperstimulation.